

ABSTRACT

An optical condenser device has light sources (10, 20) and an optical combiner (30). Each light source (10, 20) includes a semiconductor laser array (12, 22), a collimator lens (16, 26) and a beam converter (18, 28). The optical combiner (30) combines the beams from the light sources (10, 20). The spread of the beams in planes perpendicular to the direction of alignment of the active layers (14, 24) is restrained by the refraction of the collimator lenses (16, 26). The transverse sections of the respective beams are rotated by substantially 90° by the beam converters (18, 28). The spread of the beams in the direction of alignment of the active layers is thus restrained and crossing of adjacent beams becomes unlikely to occur.